

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 4, line 26, multiplexer 12 needs to be changed to 102 and apparatus 14 should be 144. Also, figure 4 is missing from drawing list on page 4, lines 9-11.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-5 are directed to an abstract method but are not tied to any particular apparatus, nor do they transform one material into a different material or another form, see *In re Comiskey*, 499 F.3d 1365 [84 USPQ2d 1670] (Fed Cir. 2007).

Claims 6-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 6-10 are directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only, see MPEP 2173.05 (p) II.

Claim Rejections - 35 USC § 112

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph (*IPXL Holdings v. Amazon.com, Inc.*, 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005)).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wajs (EP 1 143 772).
7. With respect to claims 1 and 6, Wajs teaches that it is supplying selected sections of video information in reverse play back mode (**wherein a VCR-like rewind function is supported, par. [0004]**); detecting a crossing position (**a control word identifier, abstract**), where said supplying involves backward jumps across a boundary between segments (**However when going backwards through the data stream, the ECM at any location will not have the control word CW_p for the previous data**

packet. This means that the processing unit 8 must look further back than the current data packet being processed by the descrambler in order to find a previous ECM, par. [0015]); selecting one of the units of control word information that contains the control word required for decrypting a first segment normally previous to a second segment that extends up to the boundary (comprises a control word generator...a previous control word (CW_P), a current control word (CW_C) and a next control word (CW_N), par. [0005]);

resynchronizing supply of the units of control word information relative to supply of the sections of video information, supply of said one of the units of control word information being triggered by detection of the crossing position **(When the receiving apparatus in going backwards through the content, the processing unit picks up the first ECM it finds, sends the ECM to the ECM decryption device and requests the decryption device to deliver current and previous keys and loads these keys into the descrambler. Processing the ECM's and synchronizing the provision of control words is relatively simple in this manner, par [0007]); concurrently storing at least two control words supplied for use in decrypting adjacent segments (the ECM's are stored as part of the content. It is also possible to store the ECM's separately with timing information, par. [0019]).**

8. With respect to claims 2 and 7, Wajs teaches that it is storing boundary information that identifies control word change locations at boundaries between the segments in the stream **(the ECM's are stored as part of the content. It is also possible to store the ECM's separately with timing information, par. [0019]);**

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selecting a series of section start locations that are successively earlier in a normal sequence of the stream, successively replayed sections starting at successive ones of the section start locations in the series, whereby each section start location is associated with a time point of replay, data from each section being replayed in normally forward direction **(a processing unit with means to control playback of the stored content, going fast forward and going backwards, wherein the processing unit is programmed to extract ECM's...to provide at least a next control word (CW_N) at play back or going fast forward, and to provide at least a previous control word (CW_P) and a current control word (CW_C) at going backwards, par. [0006]);**

using the boundary information to determine the crossing positions in the series, where jumps across boundaries occur; retrieving respective ones of the units for respective ones of the crossing points, so that the respective one of the units retrieved for the respective one of the crossing point contains, as control word, the control word required for decrypting the first segment for the respective one of the crossing points **(By providing entitlement control messages with three control words, i.e. the current, next and previous control words, the receiving apparatus can playback stored content from disc in a normal manner, wherein further fast forward and rewind functions are available. When the receiving apparatus is going backwards through the content, the processing unit picks up the first ECM it finds, sends the ECM to the ECM decryption device and requests the decryption device to deliver current and previous keys and loads these keys into the descrambler, par.**

[0007]); supplying the respective ones of the units, synchronized to respective time points of section start locations at the respective ones of the crossing positions **(Processing the ECM's and synchronizing the provision of control words is relatively simple in this manner, par [0007]).**

9. With respect to claims 3 and 8, Wajs teaches that each unit contains a first and a second control word for decrypting a normally earlier and later one of a pair of successive segments respectively **(the processing unit 8 delivers the control words CW₀ , CW₁ to the descrambler 6, par. [0014])**, said selecting comprising selecting said one of the units of control word information so that the first control word of the unit is the control word required for decrypting the first segment **(a decryption device 7 for decrypting ECM's to obtain the control words CW, par. [0014]).**

10. With respect to claim 4 and 9, testing, for the crossing point, whether the section starting at the first section start location after the crossing point extends across the boundary and, if so, delaying supply of said one of the units substantially until the end of replay of data from the section and if not supplying the respective one of the units substantially together with a beginning of replay of the section **(In normal use, when only going forward, an ECM is extracted from the stream and will at least contain the control word CW₁ or CW₀ to be used at the next transition from identifier 1 to 0 in the data packet stream. However when going backwards through the data stream, the ECM at any location will not have the control word CW_p for the previous data packet. This means that the processing unit 8 must look further**

back then the current data packet being processed by the descrambler in order to find a previous ECM, par. [0015]).

11. With respect to claim 5, Wajs teaches that supplying said one of the units only after replay of data from the section that starts from the section start location following the crossing point (**As indicated, a new ECM is extracted from the stream shortly before a transition from data packet A to B, from B to C etc. The ECM extracted from the data stream shortly before the beginning of data packet A, includes the previous control word CW_{P1} , the current control word CW_{A0} , and the next control word CW_{B1} , par. [0017]).**

12. With respect to claim 10, see rejection of claim 3 above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHROUZ YOUSEFI whose telephone number is (571)270-3558. The examiner can normally be reached on Mon-Fri 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Robertson can be reached on (571) 272-4186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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